

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1 – 41 (cancelled)

Claim 42 (new) An *in vitro* method for testing the inflammatory effect of a probiotic material comprising

introducing a probiotic material comprising an inflammatory agent into a system comprising epithelial cells of gastrointestinal, respiratory or genitourinary origin which interact with the immune system and peripheral blood mononuclear cells; and

determining the change in an immunological marker in response to the probiotic material, the cells which interact with the immune system being on a microporous support.

Claim 43 (new) The method of claim 42, wherein the cells which interact with the immune system and the peripheral blood mononuclear cells are of matched origin.

Claim 44 (new) The method of claim 43, wherein the cells of the immune system are of gastrointestinal, respiratory or genitourinary origin.

Claim 45 (new) The method of claim 42, wherein the cells which interact with the immune system are in the form of a monolayer.

Claim 46 (new) The method of claim 42, wherein the immunological marker is a cytokine.

Claim 47 (new) The method of claim 46, wherein the cytokine is TNF α .

Claim 48 (new) The method of claim 46, wherein the cytokine is IL-8.

Claim 49 (new) The method of claim 42, wherein the inflammatory effect is an anti-inflammatory effect.

Claim 50 (new) The method of claim 42, wherein the inflammatory effect is a pro-inflammatory effect.

Claim 51 (new) The method of claim 42, wherein the probiotic material includes a strain of *Bifidobacterium*.

Claim 52 (new) The method of claim 42, wherein the probiotic material includes a strain of *Lactobacillus*.

Claim 53 (new) A method for testing the inflammatory effect of a probiotic material comprising the steps of:

 placing a microporous support having a layer of epithelial cells of gastrointestinal, respiratory or genitourinary origin thereon which interact with the immune system in contact with a nutrient medium in a culture well;

 introducing a composition containing peripheral blood mononuclear cells to the medium;

 subsequently introducing a probiotic material comprising or suspected of comprising an inflammatory agent to either one or both cells; and

 determining the change in an immunological marker in response to the probiotic material.

Claim 54 (new) The method of claim 53, wherein the epithelial cells and the immune system cells are of matched origin.

Claim 55 (new) The method of claim 54, wherein the cells of the immune system are of gastrointestinal, respiratory or genitourinary origin.

Claim 56 (new) The method of claim 53, wherein the layer is a monolayer.

Claim 57 (new) The method of claim 53, wherein the immunological marker is a cytokine.

Claim 58 (new) The method of claim 57, wherein the cytokine is TNF α .

Claim 59 (new) The method of claim 57, wherein the cytokine is IL-8.

Claim 60 (new) The method of claim 53, wherein the inflammatory effect is an anti-inflammatory effect.

Claim 61 (new) The method of claim 53, wherein the inflammatory effect is a pro-inflammatory effect.

Claim 62 (new) The method of claim 53, wherein the probiotic material includes a strain of *Bifidobacterium*.

Claim 63 (new) The method of claim 53, wherein the probiotic material includes a strain of *Lactobacillus*.